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MANAGING CHALLENGING BEHAVIOUR IN AN ADULT WITH LEARNING DISABILITIES: THE USE OF LOW AROUSAL APPROACH

Andrew McDonnell

South Birmingham Psychology Service, U.K.

Simon Reeves

Community Challenging Behaviour Service, Birmingham, U.K.

Amanda Johnson

South Birmingham Psychology Service, U.K.

Alan Lane

Monyhull Hospital, Birmingham, U.K.

Abstract. Behaviour change is often a desired outcome for carers and professionals who work with people with learning disabilities and challenging behaviours. Managing these behaviours in the short term is an important step towards this goal. This single case study presents the use of a low arousal approach in managing challenging behaviours in a young man labelled with severe challenging behaviour. This strategy focuses on the interaction of the carers with the client and how their approach has an important impact on the behaviour of the client. The study documents the incidents of challenging behaviour and shows a decline in their frequency from baseline over a one-year period. These gains were maintained at five-month follow-up. The implications for services of these findings are discussed.

Keywords: Challenging behaviour, defusion, low arousal.

Introduction

Challenging behaviour in people with learning disabilities is a major concern of service providers. Many of these behaviours are likely to be long term and not necessarily

Reprint requests to Andrew A. McDonnell, 208 Monyhull Hall Road, Kings Norton, Birmingham B30 3QJ, U.K.

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changed by transfer from hospital to community housing (Felce, Lowe, & DePaiva, 1994). It has been suggested that successful non-aversive intervention should contain long term pro-active intervention strategies combined with short term reactive strategies (Donnellan, LaVigna, Negri-Schoulz, & Fassbender, 1988; Horner et al., 1990; LaVigna & Donnellan, 1986). There are a number of outcome studies on long term non-aversive interventions (Whitaker, 1993; Emerson, 1993), but there is comparatively little practical research on short term reactive strategies for managing challenging behaviours. It is concerning that the vast majority of these strategies appear to rely on anecdotal rather than empirical evidence (McDonnell & Sturmey, 1993).

Staff behaviour has been a neglected area of research (Hastings & Remington, 1994a). Staff tend to respond intermittently to challenging behaviours and tend to be inconsistent when carrying out behavioural programmes, often reinforcing challenging behaviours (Hastings & Remington, 1994b). Staff demands and requests frequently precede challenging behaviours (McDonnell, Johnson, & Allen, 1997), care staff may also attribute blame for challenging behaviours to the person (Bromley & Emerson, 1995), and this may be especially true of physical incidents (McDonnell et al., 1997). The behaviour of staff would appear to be a critical area of intervention for clinicians who are interested in both behaviour change and behaviour management approaches. Training care staff in the management of challenging behaviours using low arousal approaches has been proposed in the literature (McDonnell, McEvoy, & Dearden, 1994; McDonnell, Hardman, & Shand, 1997). This approach attempts to alter staff behaviour by avoiding confrontational situations and seeking the least line of resistance in defusing incidents. There are three components to the approach. First, the reduction of potential points of conflict around an individual by decreasing staff demands and requests; second, the adoption of strategies that avoid potentially arousing triggers (direct eye contact, touch, removal of spectators to the incident); third, a major emphasis is placed on the avoidance of non-verbal triggers that staff may adopt and that may lead to conflict (such as aggressive postures and stances).

This case study presents a behaviour management approach which adopted a low arousal approach in an attempt to reduce the incidence of challenging behaviour, in a young man with long term difficulties that have been resistant to behavioural interventions.

Case history

John was a 35-year-old man with mild/moderate learning disabilities (IQ 52). He resided as an informal client on a locked ward of a large hospital for adults with learning disabilities. The ward had a staff ratio of three staff to ten clients. The ward catered for crisis admissions from community settings. The environment consisted of a dormitory rather than single bedrooms. The residents on the ward varied in diagnoses, with the majority of clients sectioned under the Mental Health Act (1983). Presenting problems ranged from sexual offences to challenging behaviours caused by long term mental illness.

John's behavioural difficulties became noticeable from the age of 12 when he attended a residential school for people with learning disabilities. Prior to this, John was described as a friendly child, although sometimes "moody and difficult to please".

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His challenging behaviours consisted of screaming, shouting, becoming abusive and threatening, banging and throwing objects. Due to John's physical size, his behaviours often appeared very threatening to others.

John was first admitted to his current hospital in 1982, again in 1989 and 1993 (after a short admission to a residential service from which he absconded). He had been admitted to several other hospitals and hostels over the years, returning to the current one when his behaviour could not be managed. Several strategies had been employed to manage and change John's behaviour. These had included token economy programmes, ignoring the behaviour, punishment such as stopping his money, and reinforcing appropriate behaviour with staff attention, using DRO schedules; John had also been administered haloperidol. None of these approaches appeared to have a lasting effect on his behaviour. The introduction of relaxation and anger management techniques had similarly been unsuccessful due to John's inability to employ them at times when he became aroused and angry. There was also anecdotal evidence that many of these interventions had been applied in an inconsistent manner.

Functional analysis

A broad definition of functional analysis was employed (Samson & McDonnell, 1990), which attempted to explain and predict John's behaviour. Staff were asked to monitor John's behaviour for a three-week period using a functional analysis checklist (O'Neill, Horner, Albin, Storey, & Sprague, 1990). All staff were interviewed about John's ward based behaviour and all relevant medical and psychological records were examined. From these different sources of data a pattern emerged. There were a number of possible triggers of John's challenging behaviours. Staff demands and requests appeared to be highly predictive of John's challenging behaviours. John also appeared to misunderstand relatively simple instructions and became confused about what was being requested of him. He constantly sought reassurance by making repetitive requests of staff usually to clarify ward based routines and activities. Often this was perceived by ward staff as John attempting to "monopolize their time on purpose". Further evidence for the "confusion hypothesis" was provided by John's short attention span. John often presented with challenging behaviours in an attempt to avoid activities or demands, for example, absconding from both hospital and residential services. John's behaviours had been resistant to numerous positive and non-positive interventions. The vast majority of these interventions appeared to be aversive in nature. This was especially true of his previous admissions to the hospital, when there had been frequent use of physical restraint and seclusion to manage his behaviour. Indeed, some of the staff he encountered on the ward had participated in such practices. His constant re-admission to hospital services indicated that the problems were long term and would not be easily ameliorated. Discussions with John by two of the authors presented a picture of a man who was fiercely independent and opinionated about many aspects of his life. He was angry about his sectioning under the Mental Health Act. He was also extremely "short tempered" but had been resistant to approaches that had attempted to teach him how to manage his anger. From John's perspective challenging behaviours were an effective form of communication.

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The reactive plan

After the most recent re-admission, it was decided to attempt to manage John's behaviour by designing a reactive plan based on the philosophy of a low arousal approach (McDonnell et al., 1994). The major areas of conflict in John's day were analysed by use of records, interviewing John, and direct observation. Staff responses to John's behaviour were also analysed by interview and direct observation. Three staff reported that John was difficult to ignore, and one member of staff stated that they felt he required a consistent approach that should involve ignoring John's behaviour. Direct observations of staff revealed a great deal of inconsistency about how John's behaviours should be managed and indeed, how it was managed in reality. Some of the strategies included: ignoring him, arguing with him, threatening sanctions, and on at least one occasion staff locked their office door.

To help obtain a consistent approach, the main trigger areas on the ward were examined. Points of conflict identified included, waiting for things such as food and money and resulting arguments about food, arguments and teasing from peers, being remonstrated with, receiving mixed or inconsistent messages from staff, and the proximity of others when he was upset. A pattern to John's outbursts emerged that focused on demands or requests made of him. The low arousal approach emphasized reducing these points of conflict. The reactive plan consisted of the following steps. When John became aggressive staff were taught to back away from him and keep the distance between the staff member and John to between three to six feet. Staff were to avoid making direct eye contact with him; most importantly they were to avoid touching him. If other residents were in the vicinity staff were advised to remove them from the situation. At no time were they to attempt to remove John. Staff were instructed not to argue with John when he was overtly angry or to make repetitive verbal requests such as "calm down". Demands on John were reduced, these included: giving him the choice to attend a day care facility if he so chose, and being able to have food and snacks when he requested them on the ward. Where possible, explanations were given to John about the reduced level of demands being placed on him. Staff were encouraged to say to him "it's your choice what you want to do John" and it was hoped that this would avoid him becoming confused about what the staff were attempting to do.

Design

The basic design of the study followed the A:B:C format. Baseline recording was set-up over a five-week period (weeks 1–5). The frequency of his outbursts was recorded by the day staff. Following the baseline, further 50-day recording periods were to be used. Due to the difficulties in getting ward staff to adopt continuous recording, it was decided to use 50-day assessment periods to provide a more accurate picture of the outbursts. The first intervention phase used a combined approach of medication (zuclopenthixol) and the low arousal approach (weeks 10–16). Due to a debate about the efficacy of psychological interventions being adopted with John, and the relatively high frequency of the behaviour, staff were insistent that he be placed on some form of medication. Weekly reactive planning meetings were held to discuss elements of the plan, and at the end of phase 1 it was decided at one of these meetings to continue

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with the medication to give the behaviour time to stabilize. This approach therefore continued during the second intervention phase (weeks 27–33). With John's consent, the medication was withdrawn and so recording in phase 3 (weeks 42–48) measured only the effects of the low arousal approach. The final phase of recording was the follow-up (weeks 73–79).

Dependent measures

Five behaviours were measured: shouting and screaming, biting his hand, hitting/destroying objects, stamping feet, and hitting people. These categories were not mutually exclusive, and if all five behaviours occurred in one episode then that was scored as one incident. A reliability check on the records was implemented by the second author observing John for seven half-hour time periods at high-risk times of the day. These time periods were selected at random and the care staff were blind to the intentions of the observer. Only one incident was recorded by the observer during this time. The staff had recorded this incident giving an inter-observer reliability co-efficient of 100%. This figure is artificially high. Although the authors would have preferred more observations of the target behaviours, it was decided that the behaviour management intervention was urgently needed by the staff and therefore no further observations were undertaken. Due to concerns that John might rapidly gain weight his bodyweight was recorded at least twice during each phase of the intervention.

Staff training and support

All staff received training in a three-day workshop in the management of challenging behaviours (McDonnell, 1997). The training course examined the philosophy behind the use of low arousal approaches, care staff were also taught and staff had to practise the approach by means of role play. A more socially acceptable form of physical restraint (McDonnell, Sturmey, & Dearden, 1993) was taught to the staff team. A major objective of this training was the adoption of a non seclusion policy on the ward, which was achieved during this time period (McDonnell & Reeves, 1996). Prior to the implementation of the approach, all of the staff team attended a one-day workshop in non-aversive behaviour change strategies. Throughout the entire intervention period weekly reactive plan meetings were used to discuss problems with the low arousal approach. All staff had to read the reactive plan and were encouraged to monitor and be critical of each other's behaviour.

Results

The frequency of John's outbursts showed a continued decline during the intervention phases (see Figure 1). During the baseline period, a total of 60 incidents was recorded. This almost halved to 36 within the introduction of the combined approach in phase 1, and decreased to 24 in phase 2. The recording period from weeks 42–48 (phase 3), showed a further reduction in recorded incidents to a total of 18. There were 16 incidents recorded at follow-up. It would appear that the introduction of the medication had an effect on the frequency of John's outbursts. However, its withdrawal and the

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continuation of the low arousal approach appear to have produced a stabilized pattern of behaviour that was maintained at follow-up.

An intermittent record of John's weight during these recording periods was taken. During phase 1, with the introduction of the zuclopenthixol medication, John's highest weight was 17st 7lbs, which rose to a high of 19st 1lb during phase 2. This weight gain could be due to a side effect of the medication. After the withdrawal of medication in phase 3, John's weight began to fall, the highest recording being 18st during this period. At follow-up, the highest recorded weight was 15st 4lb. This reduction may have been due to the withdrawal of the medication, but was also due to better self-management on the part of John.

Discussion

This study has shown the effectiveness of the low arousal approach for John. He appears to have benefited from staff using a consistent approach with him and reducing the pressures and demands placed on him. Some methodological problems need to be noted. John did spend increasing amounts of time off the ward as his behaviours on the ward improved. It is unclear whether his behaviour off the ward improved or not; however, an examination of hospital records showed no significant increase in negative behaviours over the time period of the study. It should be noted that the remit of this study was to examine his ward-based behaviour. It would also be unlikely that his behaviour would have significantly improved whilst he was off the ward, as the entire approach focused on staff behaviour within his living environment. It is evident from this study that much more research is needed into the generalization of behaviour management approaches. John's behaviour did not significantly increase after the withdrawal of the zuclopenthixol. This suggests that the decrease is unlikely to be due to the drug alone, although it is difficult to judge the compound effects of combining medication with clear behaviour management strategies. The multidisciplinary team deemed it unethical to reintroduce the medication at a later phase. It would have been ideal not to have administered any medication to John during the period of this intervention; however, this case study describes a "real world" intervention rather than a tightly controlled laboratory study.

Staff behaviour is an area that has received little attention in the literature (Hastings & Remington, 1994a, b). The consistent behaviour of staff has been an important aspect of this intervention. On many occasions staff appeared to be angry that John had been allowed to "do as he please" with no consequences for his behaviour. The expression of the negative feelings was encouraged and open discussion on the benefits of the approach took place during the weekly reactive planning meetings. It is difficult to assess the impact of weekly multidisciplinary meetings on the reactive planning process, although they did appear to keep changes to reactive plans to a minimum. The impact of staff training on the consistency of staff is difficult to assess, but staff appeared to be consistent about the implementation of John's reactive plan. There are a number of possible reasons for this finding. First, staff were provided with a clear rationale for the low arousal procedure. Second, consultation and debate with staff was encouraged. Third, staff received training in the practical application of the philosophy. Future research needs to focus on these areas in more detail. The success of the

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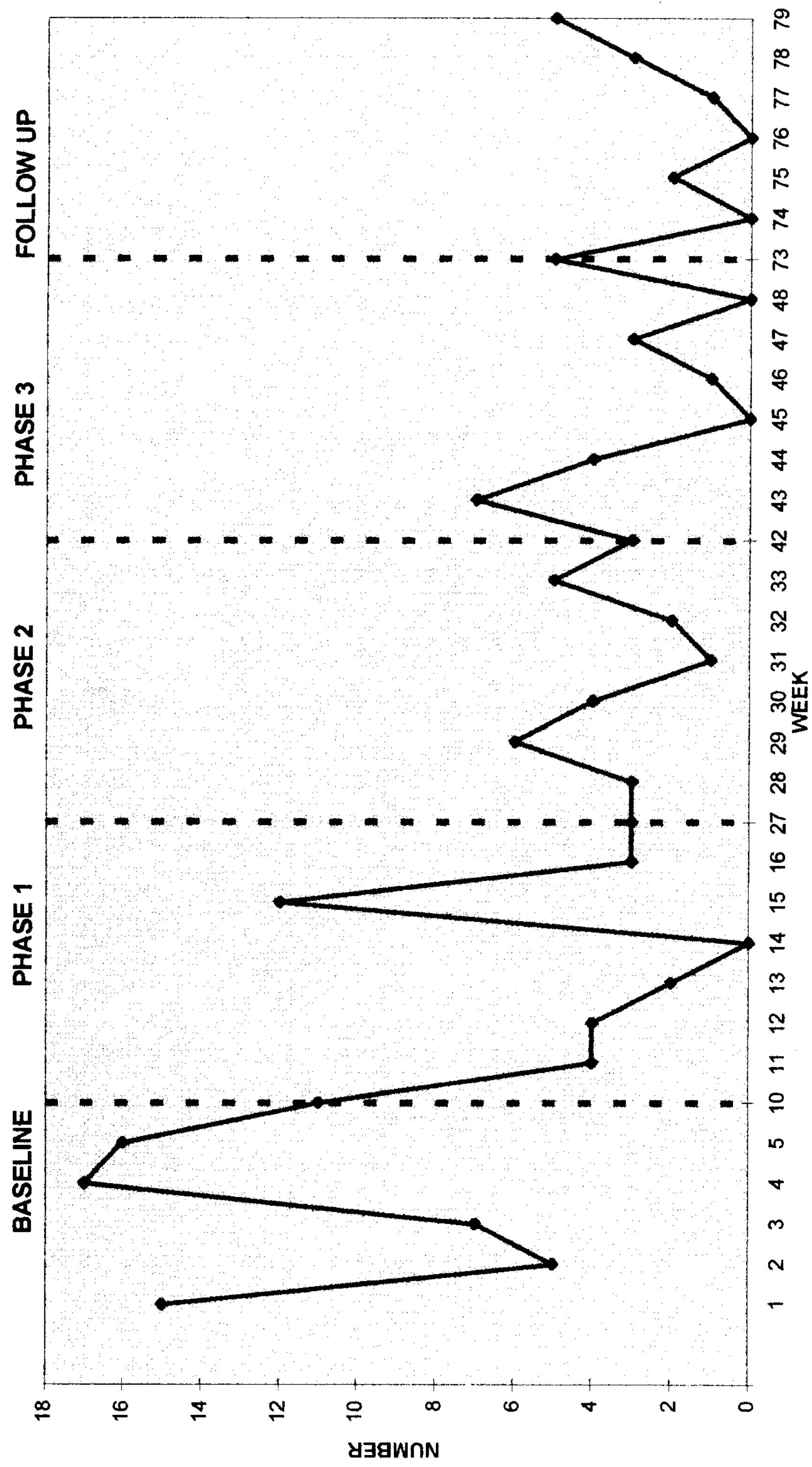

Figure 1. Frequency of temper outbursts over five recording phases

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approach can be measured by the fact that John was not physically restrained using the recommended procedure (McDonnell et al., 1993) on any occasion.

John experienced some weight gain during the intervention phases 1 and 2. His weight decreased following the withdrawal of medication, although not to baseline levels. However, some staff reported a fear that if not stopped from eating, John would continue to eat excessively and gain weight. This fear did not become a reality.

A reduction of outbursts was achieved. This has been an attempt to manage behaviour, not to change it, and from the results of this study, we would predict that, if John were placed in an environment where the demands and pressures were increased, the frequency of incidents would return to baseline levels. A major clinical problem that occurred throughout the study involved convincing care staff that a low arousal approach does not mean that the individual "gets away with everything". It is our contention that because John's behaviours have been more successfully managed, longer term behaviour change strategies not only seem desirable but achievable. Challenging behaviours have to be successfully managed before they can be changed. Non-aversive approaches may well be a desirable goal of applied behaviour analysts (Whitaker, 1993; Emerson, 1993; Donnellan et al., 1988; Horner et al., 1990). A central theme to these approaches involves the development of a positive relationship, which is in itself a long term goal (McDonnell, 1997). If these approaches are to be given a chance to succeed, there needs to be much more research conducted into the effectiveness of short term non-aversive strategies such as low arousal approaches (McDonnell et al., 1994) in the very near future.

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